WHAT IS CLAIMED IS:

1.   A display apparatus having plural luminance
modulation elements that modulate luminance upon
5   application of a voltage of positive polarity and do not
modulate luminance upon application of a voltage of reverse
polarity, having

plural scanning electrodes parallel with each other
and plural data electrodes parallel with each other, in
10   which each of the luminance modulation elements is disposed
at an intersection between the scanning electrode and the
data electrode, and having

first driving means connected to the plural scanning
electrodes and outputting scanning pulses, and second
15   driving means connected to the plural data electrodes,
wherein, at a certain time point,

the scanning electrodes are grouped into those in a
selected state applied with a scanning pulse and those other
than described above in a non-selected state,

20   the number of the scanning lines in the selected state
is n_1,

the scanning lines in the non-selected state are
grouped into non-selected state scanning lines at a high
impedance state and non-selected state scanning lines at a
25   low impedance state, the non-selected state scanning lines

at the high impedance state are at a higher impedance state
than the scanning lines in the selected state, and the
non-selected state scanning lines at the low impedance state
is in a lower impedance state than the non-selected state
scanning lines at the high impedance state, and

the number of the non-selected state scanning lines
at the low impedance state is $n_1 \times 2$ or more.

2.   A display apparatus according to claim 1, wherein the
number of the non-selected state scanning lines at the low
impedance state is 10% or less for the number of the scanning
electrodes.

3.   A display apparatus according to claim 1, wherein the
impedance of the non-selected state scanning line at the
high impedance state is 1 MΩ or higher.

4.   A display apparatus according to claim 1, wherein an
organic light emitting diode is used for the luminance
modulation element.

5.   A display apparatus according to claim 1, wherein the
luminance modulation element comprises a combination of an
electron emission element and a phosphor.

6.   A display apparatus according to claim 1, wherein the luminance modulation element comprises a combination of a thin film electron emitter having an top electrode, an electron acceleration layer and a base electrode, and a

5   phosphor.

7.   A display apparatus having plural luminance modulation elements that modulate luminance upon application of a voltage of positive polarity and do not

10   modulate luminance upon application of a voltage of reverse polarity, having

plural scanning electrodes parallel with each other and plural data electrodes parallel with each other, and having

15   first driving means connected to the plural scanning electrodes and outputting scanning pulses, and second driving means connected to the plural data electrodes, wherein

the scanning electrodes are set to at least three

20   states, namely, a selected state applied with a scanning pulse, a non-selected state at a high impedance state and a non-selected state at a low impedance state,

wherein the non-selected state scanning lines at the low impedance state is at a lower impedance state than the

25   non-selected state scanning lines at the high impedance

state, and the non-selected state at the low impedance state
and the non-selected state at the high impedance state are
repeated alternately.

5   8.   A display apparatus according to claim 7, wherein
image display operation is conducted by a line sequential
scanning operation.

9.   A display apparatus according to claim 7, wherein a
10 relation $Z \times C_L > 5 \times H$ is satisfied, in which C_L represents
the electrostatic capacitance of the scanning electrode, Z
represents the output impedance of the first driving means
when the electrode is set to the non-selected state at the
high impedance state, and H represents a time slot for the
15 selected period of one scanning line.

10.   A display apparatus according to claim 7, wherein the
first driving means has a means of providing a low impedance
state when the potential on the scanning electrode in the
20 non-selected states is going to exceed a predetermined
voltage range and retaining the potential on the scanning
electrodes within the predetermined voltage range.

11.   A display apparatus according to claim 10, wherein the
25 predetermined voltage range ranges from the first voltage

end to the second voltage end, wherein at the first voltage end, the voltage applied to the luminance modulation element is on the side of the positive polarity with the amplitude of V1, and at the second voltage end, the voltage applied
5   to the luminance modulation element is on the side of the reverse polarity with the amplitude of V2, and the absolute value of V2 is larger than that of V1.

12.   A display apparatus according to claim 7, wherein the
10   following equation is satisfied:

$(1/n_p) + (n_1/N) \leq 0.1$

where n_1 represents the number of the scanning electrodes in the selected state at a time, N represents the number of the scanning electrodes, and $n_p[H]$ represents the average
15   repetition period in which the non-selected state at the low impedance state and the non-selected state at the high impedance state are repeated.

13.   A display apparatus having plural luminance
20   modulation elements comprising electron emission element and phosphor, having

        plural scanning electrodes parallel with each other and plural data electrodes parallel with each other, and having

first driving means connected to the plural scanning electrodes and outputting scanning pulses, and second driving means connected to the plural data electrodes, wherein

5   the first driving means take at least three states, namely, a selected state of applying scanning pulses, a non-selected state at a high impedance state and a non-selected state at a low impedance state, the non-selected state scanning lines at the low impedance state

10   is at a lower impedance state than the non-selected state scanning lines at the high impedance state, and the non-selected state at the low impedance state and the non-selected state at the high impedance state are repeated alternately.

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14.   A display apparatus according to claim 13, wherein the image display operation is conducted by a line sequential scanning operation.

20 15.   A display apparatus according to claim 13, wherein a relation $Z \times C_L > 5 \times H$ is satisfied, in which C_L represents the electrostatic capacitance of the scanning electrode, Z represents the output impedance of the first driving means when the electrode is set to the non-selected state at the

high impedance state and H represents a time slot for the selected period of one scanning line.

16. A display apparatus according to claim 13, wherein the first driving means has a means of providing a low impedance state when the potential on the scanning electrode in the non-selected states is going to exceed a predetermined voltage range and retaining the potential on the scanning electrodes within the predetermined voltage range.

17. A display apparatus according to claim 16, wherein the predetermined voltage range ranges from the first voltage end to the second voltage end, wherein at the first voltage end, the voltage applied to the luminance modulation element is on the side of the positive polarity for the luminance modulation element with the amplitude of V1, and at the second voltage end, the voltage applied to the luminance modulation element is on the side of the reverse polarity with the amplitude of V2, wherein the absolute value of V2 is larger than that of V1.

18. A display apparatus according to claim 13, wherein the following equation is satisfied:

$$(1/n_p) + (n_1/N) \leq 0.1$$

where n_1 represents the number of the scanning electrodes in the selected state at a time, N represents the number of the scanning electrodes, and $n_p[H]$ represents the average repetition period in which the non-selected state at the low

5   impedance state and the non-selected state at the high impedance state are repeated.

19.   A display apparatus according to claim 13, wherein the scanning electrode is formed on the side nearer to vacuum

10   than the data electrode.

20.   A display apparatus according to claim 13, wherein the scanning electrode is in contact with vacuum.

15   21.   A display apparatus according to claim 13, wherein some of the scanning electrodes are in contact with the spacer, and the scanning electrodes in contact with the spacer are set to the low impedance state during the display operation period.

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22.   A display apparatus according to claim 13, wherein the following equation is satisfied:

$$(1/n_p) + (n_1 + n_s)/N \leq 0.1$$

where n_1 represents the number of the scanning electrodes

25   in the selected state at a time, N represents the number of

the scanning electrodes, n_s represents the number of

scanning electrodes in contact with the spacers, and $n_p[H]$

represents the average repetition period in which the

non-selected state at the low impedance state and the

5   non-selected state at the high impedance state are repeated.